A Study of the Interactions between the Inter-City Traffic System and the Spatial Structure Evolution in the Yangtze River Delta from Time and Space Dimensions

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Abstract : The evolution of the urban agglomeration spatial structure requires strong support of the inter-city traffic system. And the inter-city traffic system can not only meet the demand of the urban agglomeration transportation but also guide the economic development. To correctly understand the relationship between inter-city traffic planning and urban agglomeration can help the urban agglomeration coordinated developing with the inter-city traffic system. The Yangtze River Delta is one of the most representative urban agglomerations in China with strong economic vitality, high city levels, diversified urban space form, and improved transport infrastructure. With the promotion of industrial division in the Yangtze River Delta and the regional travel facilitation brought by inter-city traffic, the urban agglomeration is characterized by highly increasing of intercity transportation demand, the urbanization of regional traffic, adjacent regional transportation links breaking administrative boundaries, the networked channels and so on. Therefore, the development of inter-city traffic system presents new trends and challenges. This paper studies the interactions between inter-city traffic system and regional economic growth, regional factor flow, and regional spatial structure evolution in the Yangtze River Delta from two dimensions of time and space. On this basis, the adaptability of inter-city traffic development mode and urban agglomeration space structure is analyzed. First of all, the coordination between urban agglomeration planning and inter-city traffic planning is judged from the planning level. Secondly, the coordination between inter-city traffic elements and industries and population distributions is judged from the perspective of space. Finally, the coordination of the cross-regional planning and construction of inter-city traffic system is judged. The conclusions can provide an empirical reference for intercity traffic planning in Yangtze River Delta region and other urban agglomerations, and it is also of great significance to optimize the allocation of urban agglomerations and the overall operational efficiency.

Keywords : evolution, interaction, inter-city traffic system, spatial structure

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